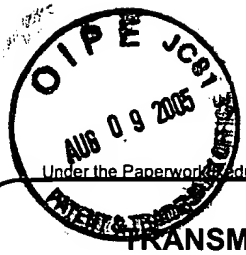
08-11-05



PTO/SB/21 (03-03)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/265,073
Filing Date	March 9, 1999
First Named Inventor	Ovard et al.
Art Unit	2635
Examiner Name	M. Shimizu
Attorney Docket Number	MI40-179

Total Number of Pages in This Submission

ENCLOSURES (*Check all that apply*)

- [✔] Fee Transmittal Form
  - [✔] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
  - [ ] Response to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
- [ ] After Allowance Communication to a Technology Center (TC)
- [✔] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC (**Appeal Notice, Brief, Reply Brief**)
- [ ] Proprietary Information
- [ ] Status Letter
- [✔] Other Enclosure(s) (please Identify below):

Return Receipt Postcard; A $500.00 Check

Remarks

EV550717146

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	James D. Shaurette, Reg. No. 39,833 Wells St. John, P.S.
Signature	
Date	8/9/05

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: August 9, 2005

Typed or printed	Jim Tidrick		
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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, Washington, DC 20231.**

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PTO/SB/17 (12-04v2)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 500.00

Complete if Known	
Application Number	09/265,073
Filing Date	March 9, 1999
First Named Inventor	Ovard et al.
Examiner Name	M. Shimizu
Art Unit	2635
Attorney Docket No.	MI40-179

METHOD OF PAYMENT (check all that apply)

☑ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account Deposit Account Number: 23-0925 Deposit Account Name: Wells St. John, P.S.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee ($)	FILING FEES Small Entity Fee ($)	SEARCH FEES Fee ($)	SEARCH FEES Small Entity Fee ($)	EXAMINATION FEES Fee ($)	EXAMINATION FEES Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 20 or HP =	_____	x _____	= _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 or HP =	_____	x _____	= _____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims: Fee ($) _____ Fee Paid ($) _____

EV550717146

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
_____ - 100 =	_____ / 50 =	_____ (round **up** to a whole number)	x _____	= _____

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	
Other (e.g., late filing surcharge): Brief of Appellant	$500.00

SUBMITTED BY

Signature	[signature]	Registration No. (Attorney/Agent) 38,933	Telephone 509-624-4276
Name (Print/Type)	James D. Shaurette		Date 8/9/05

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. 09/265,073
Filing Date ..... March 9, 1999
Inventor ..... David K. Ovard et al.
Assignee ..... Micron Technology, Inc.
Group Art Unit 2745
Examiner ..... M. Shimizu
Confirmation No. 4081
Customer No. 021567
Attorney's Docket No. MI40-179
Title: Wireless Communication Systems, Interrogators and Methods of Communicating Within a Wireless Communication System

BRIEF OF APPELLANT

To: Mail Stop Appeal Brief-Patents
Commissioner of Patents
P.O. Box 1450
Alexandria VA 22313-1450

EV550717146

From: James D. Shaurette (Tel. 509-624-4276; Fax 509-838-3424)
Wells, St. John, P.S.
601 W. First Avenue, Suite 1300
Spokane, WA 99201-3817

Appellant appeals from the final rejection, mailed February 9, 2005, of claims 1-42, 46 and 49-66. A check in the amount of $500.00 in payment of the fee required under 37 C.F.R. § 1.17(c) is attached.

08/11/2005 SDENBOB1 00000114 09265073
01 FC:1402 500.00 OP

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST.

The real party in interest of this application is Micron Technology, Inc. as evidenced by the full assignment of the pending application to Micron Communications, Inc. recorded at Reel 9823, Frames 0752-0756 in the Assignment Branch of the Patent and Trademark Office and the Notice of Merger, merging Micron Communications, Inc. with and into Micron Technology, Inc. which is recorded at Reel 010390, Frames 0391-0403 in the Assignment Branch of the Patent and Trademark Office.

II. RELATED APPEALS AND INTERFERENCES.

Appellants, Appellants' undersigned legal representative, and the assignee of the pending application are aware of no appeals or interferences which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF THE CLAIMS.

Claims 1-42, 46, and 49-66 were finally rejected. Claims 1-42, 46, and 49-66 are pending, stand finally rejected, and are being appealed.

IV. STATUS OF AMENDMENTS.

No amendments have been filed after the final rejection mailed February 9, 2005.

V. SUMMARY OF CLAIMED SUBJECT MATTER.

Concise explanations of the subject matter defined in each of the independent claims and argued dependent claims involved in the appeal follow with respect to exemplary illustrative embodiments of the specification and figures.

Referring to independent claim 1, an exemplary communication system 10 is shown in Fig. 1 and described at page 5, lines 10+ of the specification according to one illustrative embodiment. An interrogator is shown as reference 26. A housing is shown as reference 14, communication circuits are illustrated as references 106, communication stations are illustrated as references 120, and remote communication devices are illustrated as references 12. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5.

Exemplary adjustment circuitry of claim 3 is illustrated as reference 122 in Fig. 8 and described at page 26, lines 8+ of the application. At page 27, lines 3+ of the application, it is stated that the adjustment circuitry may include automatic gain control circuitry (AGC) of claim 4.

Referring to independent claim 11, a housing is shown as reference 14 of Fig. 1, communication circuits are illustrated as references 106, and communication stations are illustrated as references 120. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5.

Referring to independent claim 21, a housing is shown as reference 14 of Fig. 1 and communication stations are illustrated as references 120. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5.

Referring to independent claim 26, a housing is shown as reference 14 of Fig. 1,

communication circuits are illustrated as references 106, and communication stations are illustrated as references 120. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5. Coaxial cable is described in one embodiment at page 24, lines 22+ of the specification. At page 27, lines 3+ of the application, automatic gain control circuitry (AGC) is disclosed in one embodiment. Antennae are shown in Fig. 1 as R, X. An exemplary power amplifier is shown as reference 124 in Fig. 8.

Referring to independent claim 27, an interrogator is shown as reference 26, a housing is shown as reference 14, communication circuits are illustrated as references 106, communication stations are illustrated as references 120, and remote communication devices are illustrated as references 12. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5.

Referring to independent claim 35, an interrogator is shown as reference 26, a housing is shown as reference 14, communication circuits are illustrated as references 106, communication stations are illustrated as references 120, and remote communication devices are illustrated as references 12. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5.

Referring to independent claim 49, an interrogator is shown as reference 26, a housing is shown as reference 14, communication circuits are illustrated as references 106, communication stations are illustrated as references 120, and remote communication devices are illustrated as references 12. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5. Coaxial cable is described in one embodiment at page 24, lines 22+ of the specification.

Referring to independent claim 50, an interrogator is shown as reference 26, a

housing is shown as reference 14, communication circuits are illustrated as references 106, communication stations are illustrated as references 120, and remote communication devices are illustrated as references 12. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5. Coaxial cable is described in one embodiment at page 24, lines 22+ of the specification. Antennae are illustrated as references R, X of Fig. 1 in one embodiment. As shown in Fig. 7, a plurality of transceivers are shown as references 108, 109.

Referring to dependent claim 51, wired and wireless medium are illustrated in the exemplary embodiment of Fig. 1. With respect to dependent claim 53, a wired medium may communicate signals intermediate housing 14 and communication stations 120.

Referring to independent claim 58, an interrogator is shown as reference 26, a housing which may include a source for generating signals is shown as reference 14 of Fig. 1, communication stations are illustrated as references 120, and remote communication devices are illustrated as references 12. Exemplary circuitry of housing 14 according to one embodiment is shown in Fig. 5. Transponders are described as reference 16 in the exemplary embodiment of Fig. 2.

Referring to dependent claim 62, exemplary RF modulation is illustrated at Fig. 5 and described in the respective teachings of the specification.

Referring to dependent claim 64, exemplary commands are described at page 15, lines 3+ in one embodiment.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.

A. The 103 rejection of claims 1-42, 46, and 49-66.

B. The 103 rejection of claims 1-42, 46, and 49-66.

C. The 103 rejection of claims 1- 25, 27-42, and 51-66.

D. The 103 rejection of claims 1-42, 46, and 49-66.

E. The 103 rejection of claims 58-63 and 66.

F. The 103 rejection of claims 3, 4, 13, 14, 22 and 23.

G. The 103 rejection of claims 4, 5, 14-15, 23, 26, 30, 38, 46 and 54.

H. The 103 rejection of claims 51, 55 and 58.

I. The 103 rejection of claims 53 and 57.

J. The 103 rejection of claim 60.

K. The 103 rejection of claim 62.

L. The 103 rejection of claims 64 and 65.

VII. ARGUMENT.

A. There is no motivation to combine the teachings of MacLellan with the teachings of Wood and the 103 rejection of claims 1-42, 46, and 49-66 is improper for at least this reason.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See, e.g., MPEP §2143 (8th ed., rev. 2).

The Office on page 7 of the final Office Action dated February 2, 2005 (hereinafter "the Office Action" or "Action") states that the combination of U.S. Patent No. 5,649,296 to MacLellan and U.S. Patent No. 5,842,118 to Wood is proper in support of the 103 rejection of the claims because Wood suggests power adjustment to communicate the remote device and MacLellan teaches a communication station to communicate the remote device to extend the range of communication. Appellants respectfully submit that the 103 motivational rationale provided by the Office is deficient and the Office has failed to present a proper prima facie rejection of the claims for at least this reason.

Initially, Appellants have failed to uncover in MacLellan any teachings to extending the range of communication and the Office Action fails to identify any teachings which allegedly support the range extending assertion. Appellants have also electronically searched MacLellan and have failed to locate any teachings which support the Examiner's range extending allegations. The prior art and record is devoid of any evidence to support

the extension of range rationale for combining MacLellan and Wood.

Appellants respectfully submit that even if Wood discloses "power adjustment" and MacLellan teaches "extension of range of communication" such is insufficient motivation to combine the reference teachings. Appellants respectfully submit the mere fact that references *can* be combined or modified does not render the resultant combination obvious *unless the prior art also suggests the desirability of the combination.* MPEP §2143.01 (8th ed., rev. 2) *citing In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Preferably, the Examiner's explanation should be such that it provides that impetus necessary to cause one skilled in the art to combine the teachings of the references to make the proposed modification. *Ex Parte Levengood,* 28 USPQ2d, 1300, 1301, Footnote 2, (Bd. Pat. App. and Inter. 1993). The bald unsupported allegations, even if true, merely pertain to alleged operations of the distinct references and fail to provide the required impetus to combine the references.

Appellants also submit the motivation provided by the Office on page 2 of the Action is insufficient. More specifically, at page 2 of the Action, the Office states:

> Since prior arts of Wood and MacLellan are common in the art of tag identification system, and prior arts of Wood and Cuckler are common in the art of remote or wireless communication, they are combinable to teach a communication station remotely located with respect to the housing, and generating the forward link communication signal comprising a modulated signal.

In the present Action, the Office has merely made allegations of what the references individually disclose (unsupported with respect to MacLellan and extension of range) with no rationale as to why one of skill in the art would be motivated to combine the reference teachings. **The mere fact that references can be combined is not sufficient.**

The Federal Circuit discussed proper motivation *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). The motivation identified in the Office Action is akin to the conclusory statements set forth in *In re Lee* which were found to fail to provide the requisite motivation to support an obviousness rejection. The Court in *In re Lee* stated the factual inquiry whether to combine references must be *thorough and searching*. It must be based *on* ***objective*** *evidence of record*. The Court in *In re Fritch*, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992) stated motivation is provided only by showing some *objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art* would lead that individual to combine the relevant teachings of the references. The *Lee* Court stated that the Examiner's *conclusory statements* in the *Lee* case do not adequately address the issue of motivation to combine. The Court additionally stated that the factual question of motivation is material to patentability and ***can not be resolved on subjective belief and unknown authority. The Court also stated that deficiencies of cited references cannot be remedied by general conclusions about what is basic knowledge or common sense. The Court further stated that the determination of patentability must be based on evidence.***

In the instant case, ***the record is entirely devoid of any evidence to support motivation to combine the teachings apart from the bald conclusory unsupported statements of the Examiner which are insufficient for proper motivation*** as set forth

by the Federal Circuit. The Office cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims but must set forth objective rationale on which it relied.

Referring to the evidence relied upon by the Office on page 7 of the Action, it is stated that Wood discloses the power of the interrogator is adjustable so that only devices within a certain range of the interrogator will respond at col. 6, lines 30-42. However, such bald, cursory reference to power adjustment teachings present in Wood provides no rationale to combine the teachings of MacLellan with the teachings of Wood.

Further, as mentioned above, the Office fails to cite any evidentiary support for the allegation that MacLellan is concerned with extending range of communication. As mentioned above, Appellants have electronically searched MacLellan and have failed to uncover any teachings directed towards extension of communications range. In addition, even if MacLellan is directed towards extension of range of communication (which is not supported by the record), such is not sufficient to combine the teachings of MacLellan with the teachings of Wood. There is no evidence of record that the system of Wood suffers from inadequate range. To the contrary, Wood discloses power adjustment at col. 6, lines 30-42 having *greater range* and to specifically control the *range of communications or reduce the range of communications in view of the achievement of the greater range* provided at col. 6, line 32. Pursuant to *Lee*, the Office cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims but must set forth rationale on which it relied. Here, the rationale relied upon by the Office is not supported by any evidence of record including the teachings of MacLellan and in fact the teachings of Wood at col. 6 render the rationale redundant.

More specifically, the *conclusory extension of range rationale presented by the Office at page 7 of the Action in support of the combination is redundant in view of the explicit teachings of Wood.* Referring to col. 6, lines 30-42 of Wood, such teachings already clearly disclose achievement of greater range and adjusting power of interrogator 26 so that only devices within a certain range of interrogator 26 will respond. There is absolutely *no evidence of record that the range would be increased by modifying Wood per MacLellan and Wood already provides for increased range making the motivation rationale redundant and lacking and the teachings of MacLellan superfluous.* Accordingly, Wood already discloses sufficient ranging and adjustment of range teachings and one would not look to MacLellan for additional teachings in view of the teachings already disclosed in Wood. There is no evidence of record that Wood is deficient with respect to its designed mode of operation or suffers from insufficient communications range. To the contrary, Wood explicit discloses explicit arrangements for achieving greater range and providing adjustment of the communications range suitable to the intended operation of the system of Wood. Apart from unsupported opinions of the Office, there is no evidence of record that the combination of MacLellan and Wood would improve the communications range of the device of Wood or otherwise overcome any problems with the system of Wood to motivate one to combine the teachings as proposed by the Office.

Without objective evidence of record to support the combination of reference teachings, it is clear the Office has impermissibly relied upon Appellants' disclosure in formulating the 103 rejection over Wood and MacLellen. However, the motivation for forming the combination must be something other than hindsight reconstruction based on using Appellants' invention as a road map for such a combination. *See, e.g., In re Mills,*

16 USPQ2d 1430 (Fed. Cir. 1990).

Appellants respectfully submit there is no proper motivation to combine the teachings of Wood with the teachings of MacLellan and the rejection of the claims is improper for at least the above-compelling reason.

B. <u>There is no motivation to combine the teachings of Cuckler with the teachings of Wood and MacLellan and the 103 rejection of claims 1-42, 46, and 49-66 is improper for at least this reason.</u>

The Office on page 2 of the Action states that since the Wood and U.S. Patent No. 3,733,602 to Cuckler are combinable since they are common in the art of remote or wireless communication. As noted above, *the mere fact that references can be combined is not sufficient without proper motivation to combine the reference teachings.* The fact that two references are common in the art of remote or wireless communication is not sufficient motivation without proper impetus to make the combination. *See Ex Parte Levengood, infra.*

The Office further alleges on page 7 of the Action that the combination of Cuckler with Wood and MacLellan is appropriate because Wood suggests a transmitter configured to generate a forward link communication signal and Cuckler teaches base or repeater station gnerating a forward link communication signal comprising a modulated signal for the purpose of extending the range of communicaiton. Applicant respectfully submits the motivation on page 7 is deficient.

More specifically, Cuckler generates a signal for ***<u>intrusion detection</u>*** and *not for extending range of communications* as baldly alleged by the Office. The Office Action cites

no support for the allegation that Cuckler is concerned with or discloses extending of range of communications. Despite the repeated requests of Appellants for evidentiary support during prosecution, the Office has failed to recite any evidence of record to support the 103 combination of reference teachings.

The Office has failed to provide any evidence or reasoning of how modifying the system of Wood and/or MacLellan pursuant to Cuckler generating a forward link communication signal as a modulated signal will result in a communication range being extended. The teachings of Cuckler identified in the Action on page 6 merely disclose communication of a modulated signal and fail to provide any teaching or suggestion that providing a modulated signal increases the range of the system. In fact, Appellants have searched Cuckler and have failed to uncover any teachings directed towards extension of range let alone extension of range using a modulated signal as alleged by the Office. To the contrary of being directed towards communications or extending communications range, Cuckler is directed to an *intrusion system*. The alleged motivation presented by the Office falls far short of meeting the precedent established by the Federal Circuit of *In re Lee* requiring evidence to support the motivation to combine reference teachings.

In particular, there is no evidence of record that the disparate teachings regarding the intrusion detection system of Cuckler may be combined with the backscatter communications systems of Wood or MacLellan. Initially, *there is no evidence of record that using a modulated signal of Cuckler would result in an extended range of communications in Wood or MacLellan.* Wood and MacLellan already disclose modulators as references 77 and 202, respectively, and there is no evidence of record that such modulators or modulation are deficient for their disclosed operational purpose or that one

of ordinary skill in the art would be motivated to look towards Cuckler for meaningful teachings regarding modulation.

Further, Cuckler is directed towards *merely outputting pulses and receiving replies from each of the transponders present in a system to monitor whether a security violation has occurred* as set forth in col. 4, lines 10-37. *The use of modulator 46 is merely directed towards generation of the pulses for monitoring the secured perimeter*. Modulator 46 does not provide an extended range for data communications but merely is used for security. *One of ordinary skill in the art concerned with electronic communications including backscatter communications of data of Wood or MacLellan would not be motivated to look to the security pulse generator of Cuckler for meaningful teachings.* But for improper reliance upon Appellants' disclosure, there is no teaching or suggestion to combine the reference teachings of Cuckler with Wood or MacLellan and the 103 rejection is improper.

Referring to the *Lee* authority, ***the record is entirely devoid of any evidence to support motivation to combine the teachings apart from the bald conclusory statements of the Examiner which are insufficient for proper motivation*** as set forth by the Federal Circuit. The Office cannot rely on *conclusory statements* when dealing with particular combinations of prior art and specific claims but must set forth objective rationale on which it relied. The only rationale identified for combining Cuckler is either non-existent or flawed for at least the above compelling reasons. Appellants respectfully submit that one of skill in the art concerned with backscatter or wireless communications of Wood or MacLellan would not look to modulation teachings provided by a pulse generator used in security applications of Cuckler. There is no evidence of record that range of communications of Wood and/or MacLellan is deficient or would be extended if modified

pursuant to the teachings of Cuckler. The Office merely relies upon conclusory unsupported statements which are insufficient for proper motivational rationale for a proper prima facie 103 rejection.

Still referring to the alleged motivation presented by the Office to combine Cuckler to extend the range, the Action at page 7 states that *MacLellan is combinable with Wood to extend the range of communication.* Accordingly, Appellants assert that if MacLellan and Wood are combined as alleged, the resultant range of the Wood/MacLellan system is already extended. It then follows there is no additional motivation to look for additional prior art teachings (i.e., Cuckler) to again extend the range of the system. The motivational rationale for combining Cuckler set forth in the Action is allegedly already present in the combination of Wood and MacLellan and accordingly is redundant. Why would one look to modify the reference teachings of Wood and MacLellan when the reason for the modification or combination is already present in the prior art being modified? In view of the redundancy, the only reliance results from impermissible use of Appellants' disclosure and the 103 rejection over Cuckler is improper for at least this reason.

Appellants respectfully request allowance of the claims for these compelling reasons.

C. There is no motivation to combine the teachings of Cuckler with the teachings of Wood and MacLellan and the 103 rejection of claims 1-25, 27-42, 51-66 is improper for at least this reason.

The claims 1-25, 27, 42, and 51-66 recite in varying forms generation of a signal ***comprising a modulated signal*** within one entity and communication or radiation of the

modulated signal using another entity remotely located with respect to the location where the signal is generated and modulated. For example, with respect to claim 1, an exemplary embodiment of Fig. 1 of the application illustrates a communication station 120 remotely located with respect to the housing 14 and configured to *receive the modulated signal and to radiate a wireless signal corresponding to the received modulated signal* generated by circuitry of the housing. In another example, claim 58 recites generating a signal using circuitry of a source, modulating the signal using a RF transmitter of the source, communicating the signal external of the source, converting the signal using a communications station remote from the source and communicating the signal after converting to a transponder.

Cuckler is presented to allegedly disclose the circuitry of the housing comprising a transmitter to generate the forward link wireless signal comprising a *modulated signal*. Referring to Fig. 1 of Wood, *all modulation and transmission is provided within a* ***single unit*** *described as an interrogator unit*. In particular, Fig. 5 of Wood shows RF circuitry 54 within the interrogator 26, and as shown in Fig. 7, the RF circuitry 54 of the interrogator 26 provides both modulation and radiation in a single device. Referring to Fig. 2 of MacLellan, modulator 202 and transmitor 203 are both provided within a single interrogator unit 103 providing modulation of an information signal and transmitting the modulated signal via an antenna 204 as set forth in column 3, lines 36-42.

Apart from improper reliance upon Appellants' disclosure, there is no motivation to modify either Wood nor MacLellan to separate the modulation and transmission functions as positively recited in the claims. The Office relies upon teachings regarding disparate unrelated teachings of an intrusion detection system of Cuckler to modify teachings of

Wood and MacLellan directed towards information communication systems with absolutely no evidence of record of motivation for one of skill in the art to combine the references. There is no evidence of a benefit of a system or method resulting of the combination of the Cuckler teachings and there is no evidence that the disparate intrusion detection teachings may be combined with the systems of Wood or MacLellan to produce an operable system let alone an operable system which operates with improved performance (e.g., extended range). There is no evidence in the prior art that separation of modulation and communication (or radiation) results in any improvement to motivate one to combine the teachings. Without proper evidence to support motivation to combine the reference teachings, the rejection of the claims is improper.

D. Cuckler is non-analogous prior art and the 103 rejection of claims 1-42, 46, and 49-66 is improper for at least this reason.

The Examiner relies upon Cuckler in formulating the 103 rejection. Cuckler may not be properly combined with Wood nor MacLellan in support of the 103 rejection. Cuckler is directed towards an *Intrusion Detecting System and Apparatus* while Wood and MacLellan are directed towards backscatter communications systems. Non-analogous art areas cannot properly be combined for an obviousness rejection where the problems addressed by each are non-analogous from one another. *In re Deminski*, 230 USPQ 313, 315 (Fed. Cir. 1986.) A field of art is analogous *only* if one seeking the solution in one art area would be likely to seek the solution by referring to the other art. *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 225 USPQ 634 (Fed. Cir. 1985). Prior art references are only analogous if the reference is in the field of Appellants' endeavor or the reference is

reasonably pertinent to the particular problem with which the inventor was concerned. M.P.E.P. §2141.01(a) (8th ed. rev.2) (citing *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). One concerned with RFID and tag communications would not look to a reference concerned with intrusion detection for meaningful teachings. One of skill in the art addressing problems with respect to interrogation and transponder communication systems would not look to intrusion detection systems for meaningful teachings. Intrusion detection systems are not in the field of Appellants' endeavor and the problems of concern to Wood and MacLellan differ from the problems addressed by Cuckler and Cuckler is non-analogous art. The rejection of the claims is improper for at least this reason.

E. <u>There is no motivation to combine the teachings of Pidwerbetsky with the teachings of Wood, MacLellan and Cuckler and the 103 rejection of claims 58-63 and 66 is improper for at least this reason.</u>

Referring to page 15 of the Action, the Office alleges that the combination of U.S. Patent No. 6,084,530 to Pidwerbetsky is proper because Wood suggests generating a forward link communication signal and Pidwerbetsky teaches generating a polling signal using circuitry of a source for purpose of reducing collision of responding communications. Appellants respectfully submit the motivation is insufficient, not supported by objective evidence, and the Office has failed to establish a proper prima facie rejection.

In particular, the Office has cited no authority or evidence in support of allegations of motivation to combine the reference teachings. Referring to page 15 of the Action, there is no teachings in the prior art cited *in support of the position that* Pidwerbetsky generates

a polling signal to reduce collisions of responding communications as baldly alleged. In fact, Appellants have electronically searched and failed to uncover any reference to "collision" or "reduction of collisions" in Pidwerbetsky as baldly alleged by the Office. The motivational rationale cited by the Office is not supported by the prior art or any other evidence and the rejection is improper for at least this reason.

In addition, the Office points to no evidence that the system of Wood, MacLellan or Cuckler suffers from collisions of responding communications to motivate one to look to Pidwerbetsky for meaningful teachings for solutions with respect to collisions in communications. Further, even if one were motivated to look to Pidwerbetsky, Appellants have failed to uncover any teachings in Pidwerbetsky relavant to reducing collisitions. Finally, there is no evidence of record that modifications to the references of Wood, MacLellan or Cuckler per Pidwerbestsky would result in any improvement whatsoever to motivate one make the proposed combination.

Under the "Response to Arguments" section of the response at page 5, the Office at lines 1-4 continues to make unsupported bald cursory statements that Wood, MacLellan, Cuckler and Pidwerbesky are combinable because allegedly they teach an interrogation system. In response, Appellants submit there is no evidence of record of proper motivation to combine the references and the mere fact that plural reference may be directed to common subject matter such as interrogation is not sufficient for a proper 103 rejection.

The Office has failed to recite sufficient motivational rationale or any evidence in support thereof for a proper prima facie 103 rejection. The lack of motivation in combination with the reliance upon numerous references by the Office in support of the 103 rejection illustrates the inappropriate nature of the 103 rejection. Further, Appellants

respectfully submit the question under 35 U.S.C. §103 is not whether the differences between the prior art and the claims would have been obvious, but whether the claimed invention *as a whole* would have been obvious. *Stratoflex, Inc. vs. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871, 877 (Fed. Cir. 1983); M.P.E.P. §2141.02 (8th ed.). Appellants respectfully submit the 103 rejection over no less than four references illustrates the non-obvious nature of the claims and the rejection is improper for the above compelling reasons.

F. Positively-recited limitations of claims 3, 4, 13, 14, 22 and 23 are not disclosed nor suggested by the prior art even if the references are combined.

Appellants respectfully submit the Office has failed to establish a proper prima facie rejection inasmuch as positively recited limitations of the claims are not disclosed nor suggested by the prior art even if the references are combined and the rejection of the claims is improper for at least this reason. More specifically, the claims recite the *communication station including adjustment circuitry* configured to recieve the forward link communication signal from the communication circuitry and *to adjust an electrical characteristic of the forward link communication signal* which is not disclosed nor suggested by the prior art.

The Examiner at page 8 of the Action relies upon the teachings of Fig. 8 and col. 7, lines 26-47 of MacLellan as allegedly disclosing the claimed adjustment circuitry. A careful read of MacLellan including col. 7, lines 25-47 illustrate that a prior art device uses the full AM modulation scheme 601 of Fig. 8 while the inventive aspects of MacLellan (an

entirely different communications system) utilize the partial AM modulation scheme 602 to implement full duplex communications. A CW tone is absent from the prior art scheme 601 half of the time as shown in Fig. 8 while a CW tone is present at all times either at 50% or 100% power permitting full duplex with the carrier being always present. Usage of 100% or 50% modulation depends upon whether the system is a prior art system or the system of MacLellan. These teachings of MacLellan baldly refer to different modulation schemes and fail to disclose or suggest the limitations of the claims including the adjustment circuitry.

More specifically, the Office appears to recite at page 8 of the Action with respect to claim 3 the 100% AM or 50% AM (reference 601 of Fig. 8) or 100% AM and 50% AM (reference 602 of Fig. 8) as allegedly disclosing the claimed adjustment. However, the Office has failed to identify specific reference teachings which allegedly disclose the different limitations of the claims. For example, the Office has failed to identify any reference in such teachings of MacLellan regarding the different AM modulation schemes or provide any explaination as to how the differerent AM modulation schemes are to be considered to disclose or suggest the claimed *adjustment circuitry of the communciation station* in combination with the other limitations. The Office has failed to identify teachings of the claimed *adjustment circuitry of the communication station receiving the forward link communication signal or the adjustment of the electrical characteristic of the forward link communication signal*. Baldy refering to a plurality of different AM modulation schemes of MacLellan of the prior art and the invention of MacLellan may not be fairly considered to disclose or suggest the specific limitations of the claims and Appellants respectfully submit the rejection of the claims is in error for at least this reason.

G. <u>There is no motivation to combine the teachings of Lomp with the teachings of Wood, MacLellan and Cuckler and the 103 rejection of claims 4, 5, 14-15, 23, 26, 30, 38, 46 and 54 is improper for at least this reason.</u>

Referring to page 18 of the Action, the Office states that the combination of Lomp is proper because Lomp teaches automatic gain control circuitry for the purpose of power control of subsriber unit and base stations within a communication system. However, there is no evidence of record that the combination of Wood, MacLellan and Cuckler are deficient with respect to power control or that the combination has concerns or problems related to power control to motivate one of skill in the art to look to yet another reference for meaningful teachings. In fact, Wood at col. 6, lines 30-42 already provides power control rendering the alleged motivational rationale of the Office redundant and lacking. In sum, there is no objective evidence of record to support the combination of numerous prior art references in support of the rejection.

Further, not only is there no evidence to support the combination, but the Office tortures the teachings of the references in an attempt to reject Appellants' claims. In particular, the Office at page 18 states that power adjustement is disclosed in Fig. 8 of MacLellan (i.e., with the different references to full and partial AM modulation 601 and 602, respectively). However, the art is void of any teaching or suggestion of using automatic gain control circuitry to perform full or partial AM modulation which the Office states discloses the claimed adjusting. There is no evidence of record that the automatic gain control circuity may operably provide the full or partial AM modulation. The cursory statements of the Office regarding motivation are not supported by objective evidence of

record and the rejection of the claims is improper for at least this reason.

H. **Positively-recited limitations of claims 51, 55 and 58 are not disclosed nor suggested by the prior art even if the references are combined.**

Claims 51, 55, and 58 recite in varying forms generation of a modulated signal (e.g., forward link communication signals using circuitry of a housing in claims 51 and 55 and a modulated polling signal in claim 58), the communication station receiving the modulated signal and conversion of the modulated signal from a first communication medium type to a second communication medium type using the communication station.

On page 7 of the Action, the Office states that interrogator 103 of MacLellan corresponds to the claimed communication station which is remotely located from application processor 101 of Fig. 1. However, MacLellan is void of disclosing that the interrogators 103 or 104 (identified as teaching the communication station) receive a modulated signal. To the contrary, MacLellan only discloses a modulator 202 within interrogator 103 itself.

Referring to pages 3 and 13 of the Action and in support of the rejection of claim 51, the Office baldly alleges that MacLellan teaches a modulated digital signal out of computer 101 and that the signal within circuits 101-103 is a modulated signal. Further with repect to page 3 of the Action, the Office alleges that one skilled in the art recognizes "modulation signal", whenever there is transmission of a signal, is inherently the modulation of data signal with continuous wave or carrier frequency. Appellants respectfully disagree with the reliance upon inherency.

For proper reliance upon inherency, *the Office* ***must provide*** *a basis in fact and/or*

*technical reasoning to reasonably support the determination that the allegedly inherent characteristics **necessarily flow** from the teachings of the applied prior art*. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). It is *not necessary* for application processor 101 and interrogator 103 of Fig. 1 of MacLellan to communicate using modulated signals via LAN 102. In particular, MacLellan clearly discloses interrogator 103 modulating signals using modulator 202 of Fig. 2 but fails to disclose any modulation of signals using application processor 101 or commnunication of modulated signals via LAN 102. To the contrary, baseband communications are routinely used to implement communnications via a local area network such as LAN 102 wherein digital signals are provided upon a cable without modulation of any kind. In view of the failure of MacLellan to disclose modulation of signals intermediate 101 and 103 and the existence of alternative available communications intermediate application processor 101 and interrogator 103 apart from modulation (e.g., baseband without modulation), it is clear the claimed limitations of *communicating a modulated signal intermediate circuitry of a housing and a communication station remotely located with respect to the housing and the circuitry do not necessarily flow from the teachings of the prior art* as is required for proper reliance upon inherency.

Limitations of the claims regarding communication of a modulated signal intermediate the housing and the communication station are not inherent in view of alternatives including communicating unmodulated baseband signals over a LAN. The reliance upon inherency is improper and accordingly the prior art fails to disclose or suggest limitations of the pending claims including communication of modulated signals intermediate the housing and remotely located communication station in combination with

the claimed conversion of the modulated signal from a first communication medium type to a second communication medium type using the communication station. Appellants respectfully request withdrawal of the rejection of the claims in view of the improper reliance upon inherency and the failure of the prior art to disclose positively recited limitations of the claims.

I. Positively-recited limitations of claims 53 and 57 are not disclosed nor suggested by the prior art even if the references are combined.

The Office has failed to recite any teachings of MacLellan in support of the allegations on page 3 of the Action of a wired medium configured to communicate ***a modulated signal*** intermediate the application processor 101 and the interrogator 103. Further, the *reliance upon inherency is improper inasmuch as the limitations of the wired medium configured to communicate the modulated signal intermediate the housing and the communication station (claim 53) or commnicating the modulated signal from the housing using a wired medium (claim 57)* ***do not necessarily flow*** *from the teachings of MacLellan and in consideration of the usage of alternative communications including baseband communications without modulation.*

Appellants respectfully request withdrawal of the rejection of the claims in view of the improper reliance upon inherency and the failure of the prior art to disclose positively recited limitations of the claims.

J. Positively-recited limitations of claim 60 are not disclosed nor suggested by the prior art even if the references are combined.

Claim 60 depends from claims 58 and 59 and recites the communications media comprise a wire and electromagnetic energy for communicating respective ones of the polling signals of the first and second communication medium types. In combination with the teachings of base claim 58, the polling signals of the first and second communication medium types are defined as modulated signals. Even if the prior art teachings are combined, the combination fails to disclose or suggest communication of a *modulated polling signal using communication medium types including a wire and electromagnetic energy.*

The Office alleges on page 16 of the Action that "all subject matters in claim 60 are disclosed in claim 8, and therefore rejection of the subject matters expressed in claim 60 are met by references and associated arguments applied to rejection of claim 8." Appellants respectfully submit the rejection of claim 60 set forth by the Office is not a proper prima facie rejection.

In particular, claim 60 recites limitations including a wire and electromagnetic energy which are not "disclosed in claim 8" as alleged by the Office. The Office has failed to recite *prior art teachings* which allegedly disclose teachings of claim 60 in support of the rejection of claim 60. The limitations of claim 60 are not disclosed by the prior art when properly considered with the limitations of claims 58 and 59. Appellants respectfully submit the rejection of claim 60 is improper for at least this reason.

K. Positively-recited limitations of claim 62 are not disclosed nor suggested by the prior art even if the references are combined.

Claim 62 recites *generating a polling signal using circuitry of a* ***source***, *modulating the polling signal using a radio frequency transmitter of the* ***source*** and the *modulating comprises RF modulating*. Referring to page 7 of the Action, it is stated by the Office that Cuckler teaches generating the forward link communication signal comprising a modulated pulse signal forwarded via antenna 12 to antenna 13. Appellants respectfully submit even if the reference teachings are combined, the generation of a modulated pulse signal by a source of Cuckler may not be fairly interpreted to disclose or suggest the *RF modulating by a radio frequency transmitter of a source which generated the polling signal* as positively claimed. Further, the modulating by modulator of 202 of interrogator 103 of MacLellan may not be considered to disclose or suggest a radio frequency transmitter of a source which generated a signal as claimed since the informaiton signal is generated by application processor 101 and recieved by interrogator 103 per col. 3, lines 25+ of MacLellan.

Referring to page 5 of the Action, the Office relies upon the teachings of modulator 202 of Pidwerbetsky as allegedly disclosing the claimed RF modulating. However, per col. 3, lines 38+ of Pidwerbetsky, it is disclosed that the interrogator 103 receives an information signal from applications processor 101 and the modulator 202 of interrogator 103 modulates the radio signal using the information signal received from application processor. The modulator 202 may not be fairly considered to disclose or suggest *generating a polling signal using circuitry of a* ***source*** or *modulating the polling signal using a radio frequency transmitter of the* ***source*** since the signal is provided by application

processor 101.

Accordingly, even if the references are combined, positively recited limitations of claim 62 are not disclosed nor suggested by the prior art and the Office has failed to establish a proper 103 rejeciton for at least this reason.

L. Positively-recited limitations of claims 64 and 65 are not disclosed nor suggested by the prior art even if the references are combined.

Claims 64 and 65 recite in varying forms *generating a forward link communication signal using circuitry of the housing comprising data including a command*. At page 7 of the Action, the Office relies upon the teachings of a modulated pulse signal of Cuckler as allegedly teaching generating of a forward link communication signal comprising a modulated signal. Cuckler is directed towards generation of a *pulse signal* for intrusion detection. In no fair interpretation may a pulse signal for intrusion detection be considered to disclose or suggest the claimed *forward link communication signal generated by the* ***circuitry of the housing*** *comprises* ***data including a command***.

Accordingly, even if the references are combined, positively recited limitations of claims 64 and 65 are not disclosed nor suggested by the prior art and the Office has failed to establish a proper 103 rejeciton for at least this reason.

M. Conclusion.

In view of the foregoing, reversal of the rejections of the claims is respectfully requested. For any one of the above-stated reasons, the rejections of the respective claims should be reversed. In combination, the above-stated reasons overwhelmingly

support such reversal. Accordingly, Appellants respectfully request that the Board reverse the rejections of the claims.

Respectfully submitted,

Dated: 8/9/05

By: _____

James D. Shaurette
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VIII. APPENDIX A - THE CLAIMS INVOLVED IN THIS APPEAL.

1. [Previously Presented] A wireless communication system comprising:

an interrogator including:

a housing including circuitry configured to generate a forward link communication signal;

communication circuitry configured to communicate the forward link communication signal; and

a communication station remotely located with respect to the housing and configured to receive the forward link communication signal from the communication circuitry and to radiate a forward link wireless signal corresponding to the forward link communication signal;

a remote communication device configured to receive the forward link wireless signal; and

wherein the circuitry of the housing comprises a transmitter configured to generate the forward link communication signal comprising a modulated signal.

2. [Previously Presented] The wireless communication system according to claim 1 further comprising a driver amplifier coupled with the circuitry of the housing and configured to increase the power of the forward link communication signal and to apply the forward link communication signal to an input of the communication circuitry.

3. [Original] The wireless communication system according to claim 1 wherein the communication station includes adjustment circuitry configured to receive the forward link communication signal from the communication circuitry and to adjust an electrical characteristic of the forward link communication signal.

4. [Original] The wireless communication system according to claim 3 wherein the adjustment circuitry comprises automatic gain control circuitry.

5. [Original] The wireless communication system according to claim 4 wherein the automatic gain control circuitry is configured to monitor the power of the forward link communication signal and adjust the power of the forward link communication signal responsive to the monitoring.

6. [Original] The wireless communication system according to claim 1 wherein the communication station includes a power amplifier configured to receive the forward link communication signal from the communication circuitry and to amplify the forward link communication signal.

7. [Original] The wireless communication system according to claim 6 wherein the communication station includes an antenna configured to receive the forward link communication signal from the power amplifier and to radiate the forward link wireless signal.

8. [Original] The wireless communication system according to claim 1 wherein the remote communication device includes a radio frequency identification device.

9. [Original] The wireless communication system according to claim 1 wherein the communication circuitry includes a coaxial RF cable.

10. [Original] The wireless communication system according to claim 1 wherein the communication circuitry includes a plurality of transceivers individually coupled with one of the housing and the communication station.

11. [Previously Presented] An interrogator of a wireless communication system comprising:

a housing including circuitry configured to generate a forward link communication signal;

communication circuitry outside of the housing and coupled with the circuitry of the housing and configured to communicate the forward link communication signal;

a communication station remotely located with respect to the housing and including an antenna coupled with the communication circuitry and configured to radiate a forward link wireless signal corresponding to the forward link communication signal; and

wherein the circuitry of the housing comprises a transmitter configured to generate the forward link communication signal comprising a modulated signal.

12. [Previously Presented] The interrogator according to claim 11 further comprising a driver amplifier coupled with the circuitry of the housing and configured to increase the power of the forward link communication signal and to apply the forward link communication signal to an input of the communication circuitry.

13. [Original] The interrogator according to claim 11 wherein the communication station includes adjustment circuitry configured to receive the forward link communication signal from the communication circuitry and to adjust at least one electrical characteristic of the forward link communication signal.

14. [Original] The interrogator according to claim 11 wherein the adjustment circuitry comprises automatic gain control circuitry.

15. [Original] The interrogator according to claim 14 wherein the automatic gain control circuitry is configured to monitor the power of the forward link communication signal and adjust the power of the forward link communication signal responsive to the monitoring.

16. [Original] The interrogator according to claim 11 wherein the communication station includes a power amplifier configured to receive the forward link communication signal from the communication circuitry and to amplify the forward link communication signal.

17. [Original] The interrogator according to claim 11 wherein the communication station includes an antenna configured to receive the forward link communication signal from the power amplifier and to radiate the forward link wireless signal.

18. [Original] The interrogator according to claim 11 wherein the remote communication device comprises a radio frequency identification device.

19. [Original] The interrogator according to claim 11 wherein the communication circuitry includes a coaxial RF cable.

20. [Previously Presented] The interrogator according to claim 11 wherein the communication circuitry includes a plurality of transceivers individually coupled with one of the housing and the communication station.

21. [Previously Presented] An interrogator of a wireless communication system comprising:

a housing including circuitry configured to generate a plurality of forward link communication signals;

a plurality of communication stations remotely located with respect to the housing and individually configured to receive at least one of the forward link communication signals from the housing and radiate a forward link wireless signal corresponding to the at least one forward link communication signal; and

wherein the circuitry of the housing is configured to generate the forward link

communication signal comprising a modulated signal.

22. [Original] The interrogator according to claim 21 wherein the communication stations individually include adjustment circuitry configured to receive the at least one forward link communication signal and to adjust at least one electrical characteristic of the forward link communication signal.

23. [Original] The interrogator according to claim 22 wherein the adjustment circuitry includes automatic gain control circuitry.

24. [Original] The interrogator according to claim 21 further comprising a plurality of communication circuits individually configured to communicate at least one forward link communication signal intermediate the housing and one of the communication stations.

25. [Original] The interrogator according to claim 21 wherein the communication stations are individually positioned to radiate the forward link wireless signal within one of a plurality of communication ranges.

26. [Original] An interrogator of a radio frequency identification system comprising:

a housing including:

circuitry configured to generate a forward link communication signal; and

a driver amplifier coupled with the circuitry and configured to increase the

power of the forward link communication signal;

a coaxial RF cable outside of the housing and coupled with the driver amplifier and configured to communicate the forward link communication signal; and

a communication station remotely located with respect to the housing and including:

automatic gain control circuitry coupled with the coaxial RF cable and configured to monitor the power of the forward link communication signal, compare the power with a predetermined threshold value, and adjust the power of the forward link communication signal responsive to the comparison;

a power amplifier coupled with the automatic gain control circuitry and configured to increase the power of the forward link communication signal; and

an antenna coupled with the power amplifier and configured to radiate a forward link wireless signal corresponding to the forward link communication signal.

27. [Previously Presented] A method of communicating within a wireless communication system comprising:

providing an interrogator and at least one remote communication device;

generating a forward link communication signal using circuitry within a housing of the interrogator;

communicating the forward link communication signal from the housing using communication circuitry;

receiving the forward link communication signal from the communication circuitry within a communication station of the interrogator remotely located from the housing;

radiating a forward link wireless signal corresponding to the forward link

communication signal using the communication station;

receiving the forward link wireless signal within the at least one remote communication device; and

wherein the generating comprises generating the forward link communication signal comprising a modulated signal using the circuitry within the housing.

28. [Original] The method according to claim 27 further comprising amplifying the forward link communication signal before the communicating.

29. [Original] The method according to claim 27 further comprising adjusting at least one electrical characteristic of the forward link communication signal before the radiating.

30. [Original] The method according to claim 29 wherein the adjusting comprises adjusting using automatic gain control circuitry.

31. [Original] The method according to claim 29 wherein the adjusting includes:

monitoring the power of the forward link communication signal within the communication station; and

adjusting the power of the forward link communication signal responsive to the monitoring.

32. [Original] The method according to claim 31 wherein the monitoring includes:

adjusting a threshold value corresponding to a distance intermediate the housing and the communication station; and

comparing the power of the forward link communication signal received from the communication circuitry with the threshold value.

33. [Original] The method according to claim 27 further comprising amplifying the forward link communication signal within the communication station before the radiating.

34. [Original] The method according to claim 27 wherein the providing at least one remote communication device comprises providing a radio frequency identification device.

35. [Previously Presented] A method of communicating within a wireless communication system comprising:

providing an interrogator having a housing and at least one communication station remotely located from the housing;

generating a forward link communication signal using circuitry within the housing;

communicating the forward link communication signal from the housing using communication circuitry;

receiving the forward link communication signal from the communication circuitry within the communication station;

radiating a forward link wireless signal corresponding to the forward link communication signal using the communication station; and

wherein the generating comprises generating the forward link communication signal comprising a modulated signal using the circuitry within the housing.

36. [Original] The method according to claim 35 further comprising amplifying the forward link communication signal before the communicating.

37. [Original] The method according to claim 35 further comprising adjusting at least one electrical characteristic of the forward link communication signal before the radiating.

38. [Original] The method according to claim 37 wherein the adjusting includes adjusting using automatic gain control circuitry.

39. [Original] The method according to claim 37 wherein the adjusting includes:

monitoring the power of the forward link communication signal within the communication station; and

adjusting the power of the forward link communication signal responsive to the monitoring.

40. [Original] The method according to claim 39 wherein the monitoring includes:

adjusting a threshold value corresponding to a distance intermediate the housing and the communication station; and

comparing the power of the forward link communication signal received from the communication circuitry with the threshold value.

41. [Original] The method according to claim 35 further comprising amplifying the forward link communication signal within the communication station before the radiating.

42. [Original] The method according to claim 35 wherein the providing comprises providing a plurality of communication stations remotely located from the housing, and the communication stations are individually positioned to transmit a forward link wireless signal within one of a plurality of communication ranges.

Claims 43-45 are canceled.

46. [Previously Presented] The interrogator of claim 26 wherein the circuitry of the housing comprises a transmitter configured to generate the forward link communication signal comprising a modulated signal.

Claims 47-48 are canceled.

49. [Previously Presented] An interrogator of a wireless communication system comprising:

a housing including circuitry configured to generate a forward link communication signal;

communication circuitry outside of the housing and coupled with the circuitry of the housing and configured to communicate the forward link communication signal;

a communication station remotely located with respect to the housing and including an antenna coupled with the communication circuitry and configured to radiate a forward link wireless signal corresponding to the forward link communication signal; and

wherein the communication circuitry includes a coaxial RF cable.

50. [Previously Presented] An interrogator of a wireless communication system comprising:

a housing including circuitry configured to generate a forward link communication signal;

communication circuitry outside of the housing and coupled with the circuitry of the housing and configured to communicate the forward link communication signal;

a communication station remotely located with respect to the housing and including an antenna coupled with the communication circuitry and configured to radiate a forward link wireless signal corresponding to the forward link communication signal; and

wherein the communication circuitry includes a plurality of transceivers individually coupled with one of the housing and the communication station.

51. [Previously Presented] The wireless communication system according to claim 1 wherein the communication station is configured to convert the forward link communication signal comprising the modulated signal from a first communication medium type to a second communication medium type comprising a wireless medium and different than the first communication medium type.

52. [Previously Presented] The wireless communication system according to claim 51 wherein the first communication medium type comprises a wired medium.

53. [Previously Presented] The wireless communication system according to claim 1 wherein the communication circuitry comprises a wired medium configured to communicate the forward link wireless signal comprising the modulated signal intermediate the housing and the communication station.

54. [Previously Presented] The wireless communication system according to claim 4 wherein the automatic gain control circuitry is configured to adjust the electrical characteristic of the forward link communication signal comprising the modulated signal which comprises a wired signal.

55. [Previously Presented] The method according to claim 35 wherein the radiating comprises converting the forward link communication signal comprising the modulated signal from a first communication medium type to a second communication medium type comprising a wireless medium and different than the first communication

medium type.

56. [Previously Presented] The method according to claim 55 wherein the first communication medium type comprises a wired medium.

57. [Previously Presented] The method according to claim 35 wherein the communicating comprises communicating the forward link wireless signal comprising the modulated signal from the housing using a wired medium.

58. [Previously Presented] A communications method comprising:

generating a polling signal using circuitry of a source;

modulating the polling signal using a radio frequency transmitter of the source, the modulating providing a modulated polling signal of a first communication medium type;

first communicating the modulated polling signal of the first communication medium type externally of the source;

receiving the modulated polling signal of the first communication medium type within a communication station remotely located with respect to the source;

converting the modulated polling signal from the first communication medium type to a second communication medium type different than the first communication medium type using circuitry of the communication station; and

second communicating the modulated polling signal of the second communication medium type to a transponder remotely located with respect to the source and the communication station.

59. [Previously Presented] The method of claim 58 wherein the first and the second communicating comprise communicating using different communications media.

60. [Previously Presented] The method of claim 59 wherein the communications media comprise a wire and electromagnetic energy for communicating respective ones of the polling signals of the first and the second communication medium types.

61. [Previously Presented] The method of claim 58 wherein the source comprises a housing and the first communicating comprises communicating externally of the housing.

62. [Previously Presented] The method of claim 58 wherein the modulating comprises RF modulating.

63. [Previously Presented] The method of claim 62 wherein the modulating comprises modulating a carrier signal using a data signal configured to implement polling of the transponder.

64. [Previously Presented] The wireless communication system according to claim 1 wherein the forward link communication signal generated by the circuitry of the housing comprises data including a command.

65. [Previously Presented] The method according to claim 27 wherein the generating the forward link communication signal comprises generating the signal comprising data including a command.

66. [Previously Presented] The method of claim 58 wherein the second communicating comprises communicating using the communications station.